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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/391,768      | 09/08/1999  | INGEMAR JOHANSSON    | 34645-446           | 9053             |

23932 7590 05/28/2003  
JENKENS & GILCHRIST, PC  
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DALLAS, TX 75202

EXAMINER

ARMSTRONG, ANGELA A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2654

DATE MAILED: 05/28/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/391,768

Applicant(s)

JOHANSSON ET AL/

Examiner

Angela A. Armstrong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 11-19, 21, 22, 24-29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-19, 21, 22, 24-29 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 10, 2003 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 11-19, 21-22, 24-29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jarvinen et al EP 0843301 A2) in view of Solve et al (US Patent No. 5,485,522).
3. Regarding claims 1-8, 11-19, 21-22, 24-29 and 31, Jarvinen et al teach
- Providing comfort noise parameter values to generate comfort noise at page 6, lines 23-24
- Producing modified comfort noise parameters at page 6, lines 24-25
- Using the modified comfort noise parameters to produce comfort noise at page 6, lines 23-50

At page 9, line 50, Jarvinen teaches generating comfort noise ("variability information") at the receiving side ("speech decoder") of the system, instead of utilizing noise that was transmitted, which reads on "wherein said calculation step includes the speech decoder obtaining the variability information independent of the communication channel."

Comfort noise generated at the speech decoder at Figure 10;

Background noise parameter is a spectrum parameter at Figure 2C; page 6, lines 23-50

Obtaining variable background noise information at page 9, line 45 – page 10, line 4

Computing mean value background parameters at page 7, line 21 – page 8, line 33.

Producing deviation values at page 7, line 21 – page 8, line 33

Implementation in a cellular telephone at page 12, lines 26-28

Background noise parameters varying over time at page 9, line 45 – page 10, line 4

Using background noise parameters to calculate filter coefficients at page 6, lines 26-43.

Jarvinen et al do not specifically teach that the noise variability is used to perturb the comfort noise parameters. However, using noise variability information to modify signals is well known in the art.

In a similar field of endeavor, Solve discloses a system for adaptively reducing noise in speech signals which implements a variable attenuator and noise estimator and continuously updates and adapts a noise estimate (col. 3, line 55 continuing to col. 4, line 11). Solve teaches that the system may be advantageously applied to telecommunication systems without significantly increasing data processing overhead (abstract).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the comfort noise generation system of Jarvinen et al and implement

noise variation estimation to perturb signal information as taught by Solve, for the purpose of providing added noise reduction in the telecommunication system without increasing data processing overhead.

***Response to Arguments***

4. Applicant's arguments filed January 10, 2003 have been fully considered but they are not persuasive.

5. Applicant argues the Office Action does not address the limitation of "calculating , at the speech decoder, variability information indicative of variability of a background noise parameter, wherein said calculation step includes the speech decoder obtaining the variability information independently of the communication channel. Applicant is referred to page 9, line 50, in which Jarvinen teaches generating comfort noise ("variability information") at the receiving side ("speech decoder") of the system, instead of utilizing noise that was transmittted, which reads on "wherein said calculation step includes the speech decoder obtaining the variability information independent of the communication channel", as indicated in the rejection above.

Regarding claims 1 and 17, Applicant argues, "none of the reference describe perturbing comfort noise parameter values in response to variability information". In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this instance, Jarvinen was cited as teaching providing comfort noise parameter values to generate comfort noise; producing modified comfort noise

parameters; and using the modified comfort noise parameters to produce comfort noise. Solve was cited as teaching a system for adaptively reducing noise in speech signals which implements a variable attenuator and noise estimator and continuously updates and adapts a noise estimate. Thus, the combination of Jarvinen and Solve would provide for generating comfort noise; producing modified comfort noise parameters; and using the modified comfort noise parameters to produce comfort noise (as taught by Jarvinen), such that the comfort noise parameters are continuously updated and estimates adapted to allow for adaptively reducing the noise in the speech signal (as provided by Solve), which reads on “perturbing comfort noise parameter values in response to variability information.”

### ***Conclusion***

6. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 703-308-6258. The examiner can normally be reached on Monday-Thursday 7:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Angela A. Armstrong  
Examiner  
Art Unit 2654

AAA  
May 22, 2003

Marsha D. Banks-Harold  
SPE 2654